Female postabdomen (fig. 6): cerci 0.07–0.08 mm in length, each with several setae; lower lamella, long, narrow, 0.035 mm in length; triangular lobes of eighth sternum prolonged posteriorly almost as far as cerci.

Immature stages unknown.

Material examined: Holotype (on slide): ³, Panama: Changuinola, No. 358, VII-15-1965, from old egg shells of parasitized spider eggs [parasitized by Hymenoptera], coll. James O. Harrison, USNM 69510. Paratypes: 10 ³ ³, 9 ⁹ ⁹, same data as holotype; 4 ³ ³, 7 ⁹ ⁹, Costa Rica : Ciudad Quesada, No. 385, VII-15-1966, from spider egg cases, coll. James O. Harrison. All types deposited in U. S. National Museum.

A NEW GENUS AND SPECIES OF DELTOCEPHALINAE FROM PUERTO RICO

(HOMOPTERA: CICADELLIDAE)

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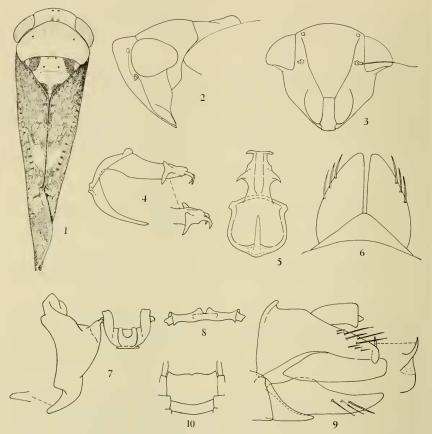
A new genus and species of leafhopper from the mountains of Puerto Rico is herein described. All efforts have failed to collect this species by sweeping from the ground or low level vegetation around the light traps in which all specimens have been caught. This seems to be a tree-dwelling species.

I have great pleasure in dedicating this genus to my friend, Dr. James P. Kramer, of the U. S. Department of Agriculture, Washington, D. C., for his many contributions to the knowledge of the Cicadellidae.

The types are deposited in the U.S. National Museum and in my collection. In the measurements that follow, 10 micrometer units correspond to 0.075 mm. To establish the systematic position of this new genus I have followed R. Linnavuori's "Revision of the Neotropical Deltocephalinae and some related Subfamilies," Annales Zoologici Societatis Zoologicae Botanicae Fennicae "Vanamo," Vol. 20, No. 1, 1959.

Krameraxus, n. gen.

Cicadellidae, Deltocephalinae, Euscelini. Relatively robust, not flattened body, about 5.9 mm long. Ocelli on anterior margin of crown contiguous to eyes. Episternum concealed. Dorsum without rough circular pits. Face flat, not hairy; frontoclypeus broadening upwards. Gena not visible from above. Crown very slightly longer medianly than next to eyes, nearly flat, smooth, rounded to face at anterior margin. Pronotum inconspicuously finely transversely rugose; narrower than head across eyes. Scutellum smooth, about 1.4 times as broad as long, apical half raised. Forewings well developed, with numerous false veins or broken pigmented lines, small irregular brownish and subcircular or subsquare whitish



Figs. 1–10, Krameraxus leucornatus, n. gen. and n. sp.: 1, habitus; 2, head and part of thorax in lateral view, 3; 3, face, 3; 4, aedeagus in lateral view; 5, aedeagus in ventro-caudal view; 6, valve and 3 plates; 7, style and connective in dorsal view; 8, connective in caudal view; 9, 3 genital capsule in lateral view; 10, 9 seventh stemum and adjacent segments.

or grayish areas; 4 apical cells, the fifth missing; apparently 3 subapicals, the crossvein closing the inner missing or perhaps obscured by the false veins. Face, crown, pronotum, and scutellum mostly yellowish-white or yellowish with a grayish sordid appearance and ornamented with pale or dark brown. Male genitalia: pygofer with membranous lateral fold and macrosetae. Plates triangular and with macrosetae. Style with a short curved apophysis and broad plate-like basal part. Connective U-shaped, probably a modification of the Y-shaped type (fig. 7), flattened. Valve and genital plate articulated, not fused. Aedeagus symmetrical, horizontal, spined apically, arising from a disc-shaped unsclerotized structure, a strong spine pointing caudad on middle of lower edge of disc-shaped structure.

Type of genus: Krameraxus leucornatus, n. sp.

Krameraxus leucornatus, n. sp.

(Figs. 1–10)

Characterized by its medium size, wedge-shaped body, and highly contrasting anterior yellowish parts with the brown forewings.

Female-face, crown, pronotum, and scutellum mostly yellowish-white; eyes brownish or yellowish, crown with 2 brown anterior spots and two posterior dashes near median line; pronotum with a brown spot on disc in line with each inner margin of eye, pale brown irregular areas near anterior margin as illustrated; scutellum with a triangular brown area near each anterior angle, a small semicircular brown area on each side near apex, 2 brown spots on disc anterior to brown transverse suture, 2 very small brownish areas anteriorly near median line (fig. 1). A dark spot below each ocellus. Anteclypeus yellowish-white on basal half. Apical half of anteclypeus, lorae, and genae heavily mottled with brown. Forewing mostly polished brown, with many darker spots, brown transverse false veins and ramose lines, with many subcircular or subsquare gravish areas; costal area yellowish and spotted with brown on middle third, first and last third brownish with lighter and darker brown spots, a hyaline area above the vellowish section of costa; inner margin of and a large round area near apex of clavus whitish. Pro- and mesofemur brown with yellowish irregular annuli; metafemur and tibiae stramineous with brown spots, especially along strongly spined margins; spines stramineous. Abdominal sterna grayish with pale brown margins. Last abdominal segment on middle of hind margin brown; pygofer mostly brown, vellowish near base of ovipositor; ovipositor brown at midlength, light colored basally and apically.

Crown slightly longer near middle than near eye (3.7:3.2), slightly less than 4 times as wide as long near eyes (12:3.2). Head wider across eyes than pronotum (25:22). Pronotum twice as wide as long (22:11). Scutellum about 1.5 times as wide as long (17:11). Last abdominal sternum as in fig. 10; pygofers with macrosetae. Length 5.9 mm.

Male—general coloration much as in female. Yellow of head and thorax with a brownish tinge, not so bright as in female; genal area lighter, with very scarce pale brown mottling; large whitish spot near apex of clavus present or with a squarish gray area in its place. Costal margin without yellowish middle area. Crown slightly longer at middle than near eye (3.1:3.0), slightly less than 4 times as wide as long near eye (11:3.0). Head wider across eyes than pronotum (23:20). Pronotum twice as wide as long (20:10). Scutellum about 1.3 times as wide as long (16:13). Male genitalia as illustrated. Length 5.2 mm.

This genus runs to the Euscelini in Linnavuori's key to the tribes of the Deltocephalinae. In his key to the genera of Euscelini, p. 153, it runs to couplet 11 if the connective is considered as of the Y-type and whether considered to have two or three subapicals. It differs strikingly from the keyed genera.

Holotype, male, from El Verde Experimental Forest Station, near El Yunque, Puerto Rico, June 1967, in a light trap, collected by the author, USNM 69658. Allotype, female, same data, in the USNM. Paratypes, four: two same data as holotype, and two from Maricao State Forest, taken in a light trap operated in the Fish Hatchery, in the author's collection.